

In the Claims

Please amend claim 13. A listing of the entire claims now pending in the application, is presented below.

1. (previously presented) A screen printing head for applying a pasty product to a printing screen, comprising:
 - a main body;
 - wiper blades attached to the main body for contacting a printing screen;
 - a first chamber providing a reservoir for containing a supply of pasty product, the first chamber being defined at least in part by the main body and including at least one outlet opening through which pasty product in use is forced under pressure;
 - a second chamber in fluid communication with the at least one outlet opening, the second chamber being defined in part by the main body and the wiper blades and being in use in communication with the printing screen; and
 - a flow director disposed in the second chamber and configured to cause a first, circulatory flow of pasty product contained therein which passes over the surface of the printing screen, and a second flow of pasty product towards the printing screen which acts to force pasty product of the first, circulatory flow towards the printing screen and into apertures therein.
2. (original) The printing head of claim 1, wherein the at least one outlet opening comprises an elongate slot.
3. (previously presented) The printing head of claim 1, wherein the flow director is further configured such as to define first and second circulation zones in which pasty product is locally circulated and through which the first, circulatory flow is directed.
4. (previously presented) The printing head of claim 1, wherein the flow director comprises vanes, with the first, circulatory flow in use passing beneath lower edges of the vanes.

5. (original) The printing head of claim 4, comprising first and second vanes disposed on opposed sides of the at least one outlet opening, with the lower edges of the vanes defining a nozzle directed towards the printing screen.
6. (original) The printing head of claim 5, wherein the nozzle is an elongate nozzle.
7. (previously presented) The printing head of claim 1, wherein the main body includes first and second lobe members which in part define the second chamber, the lobe members being disposed above respective ones of the wiper blades and having arcuate lower surfaces so as to promote the first, circulatory flow.
8. (original) The printing head of claim 1, wherein the main body includes one or more ports through which the first chamber can be charged with pasty product.
9. (original) The printing head of claim 1, wherein the main body includes a replaceable cassette which defines at least in part the first chamber, the first chamber being charged by replacement of the cassette.
10. (original) The printing head of claim 1, wherein the wiper blades comprise flexible wiper blades.
11. (original) A screen printing apparatus comprising the printing head of claim 1.
12. (previously presented) A method of screen printing using a screen printing head, the screen printing head including a chamber in communication with a printing screen and a flow director disposed in the chamber and configured to cause a first, circulatory flow of pasty product contained therein which passes over the surface of the printing screen, and a second flow of pasty product towards the printing screen which acts to force pasty product of the first, circulatory flow towards the printing screen and into apertures therein, the method comprising the steps of:

providing the first, circulatory flow of pasty product in the chamber which passes over the surface of the printing screen; and

providing the second flow of pasty product towards the printing screen which acts to force pasty product of the first, circulatory flow onto the printing screen and into apertures therein.

13. (currently amended) The method of claim 12, further comprising the step of:

locally circulating pasty product in first and second circulation zones of the chamber through which the ~~first circulatory~~ first, circulatory flow is directed.